Complete Summary

TITLE

Osteoporosis: percentage of female patients aged 65 years and older who have a central DXA measurement ordered or performed at least once since age 60 or pharmacologic therapy prescribed within 12 months.

SOURCE(S)

American Academy of Family Physicians, American Academy of Orthopaedic Surgeons, American Association of Clinical Endocrinologists, American College of Rheumatology, Endocrine Society, Physician Consortium for Performance Improvement®, National Committee for Quality Assurance. Osteoporosis physician performance measurement set. Chicago (IL): American Medical Association, National Committee for Quality Assurance; 2006 Oct. 15 p. [7 references]

Measure Domain

PRIMARY MEASURE DOMAIN

Process

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the Measure Validity page.

SECONDARY MEASURE DOMAIN

Does not apply to this measure

Brief Abstract

DESCRIPTION

This measure is used to assess the percentage of female patients aged 65 years and older who have a central dual-energy X-ray absorptiometry (DXA) measurement ordered or performed at least once since age 60 or pharmacologic therapy prescribed within 12 months.

RATIONALE

Patients with elevated risk for osteoporosis should have the diagnosis of osteoporosis excluded or be on treatment of osteoporosis.*

*The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and support the rationale:

The U.S. Preventive Services Task Force (USPSTF) recommends that women aged 65 and older be screened routinely for osteoporosis. (USPSTF)

The USPSTF recommends that routine screening begin at age 60 for women at increased risk for osteoporotic fractures. Use of risk factors, particularly increasing age, low weight, and nonuse of estrogen replacement, to screen younger women may identify high-risk women. (USPSTF)

Bone mass density (BMD) measurement should be performed in all women beyond 65 years of age. Dual x-ray absorptiometry of the lumbar spine and proximal femur provides reproducible values at important sites of osteoporosis-associated fracture. These sites are preferred for baseline and serial measurements. (American Association of Clinical Endocrinologists [AACE])

The most important risk factors for osteoporosis-related fractures are a prior low-trauma fracture as an adult and a low BMD in patients with or without fractures. (AACE)

BMD testing should be performed on:

1. All women aged 65 and older regardless of risk factors.
2. Younger postmenopausal women with one or more risk factors (other than being white, postmenopausal, and female).
3. Postmenopausal women who present with fractures.

The decision to test for BMD should be based on an individual's risk profile. Testing is never indicated unless the results could influence a treatment decision. (National Osteoporosis Foundation [NOF])

Markers of greater osteoporosis and fracture risk include older age, hypogonadism, corticosteroid therapy, and established cirrhosis. (American Gastroenterological Association [AGA])

The single most powerful predictor of a future osteoporotic fracture is the presence of previous such fractures. (AGA)

The decision to measure bone density should follow an individualized approach. It should be considered when it will help the patient decide whether to institute treatment to prevent osteoporotic fracture. It should also be considered in patients receiving glucocorticoid therapy for 2 months or more and patients with other conditions that place them at high risk for osteoporotic fracture. (National Institutes of Health [NIH])

The most commonly used measurement to diagnose osteoporosis and predict fracture risk is based on assessment of BMD by dual-energy X-ray absorptiometry (DXA). (NIH)

Measurements of BMD made at the hip predict hip fracture better than measurements made at other sites while BMD measurement at the spine predicts spine fracture better than measures at other sites. (NIH)

Pharmacologic therapy should be initiated to reduce fracture risk in women with:

- BMD T-scores below -2.0 by central DXA with no risk factors
- BMD T-scores below -1.5 by central DXA with one or more risk factors
- A prior vertebral or hip fracture (NOF)

PRIMARY CLINICAL COMPONENT

Osteoporosis; dual-energy x-ray absorptiometry (DXA) measurement; pharmacologic therapy (bisphosphonates [alendronate, ibandronate, and

risedronate], calcitonin, estrogens [estrogens and/or hormone therapy], parathyroid hormone [PTH (1-34), teriparatide], and selective estrogen receptor modules or SERMs [raloxifene])

DENOMINATOR DESCRIPTION

All female patients aged 65 years and older (see the related "Denominator Inclusions/Exclusions" field in the Complete Summary)

NUMERATOR DESCRIPTION

Patients who had a central dual-energy X-ray absorptiometry (DXA) measurement ordered or performed at least once since age 60 or pharmacologic therapy prescribed within 12 months (see the related "Numerator Inclusions/Exclusions" field in the Complete Summary)

Evidence Supporting the Measure

EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence

NATIONAL GUIDELINE CLEARINGHOUSE LINK

- Screening for osteoporosis in postmenopausal women: recommendations and rationale.
- Physician's guide to prevention and treatment of osteoporosis.
- American Gastroenterological Association medical position statement: osteoporosis in hepatic disorders.

Evidence Supporting Need for the Measure

NEED FOR THE MEASURE

Use of this measure to improve performance
Variation in quality for the performance measured

EVIDENCE SUPPORTING NEED FOR THE MEASURE

Feldstein A, Elmer PJ, Orwoll E, Herson M, Hillier T. Bone mineral density measurement and treatment for osteoporosis in older individuals with fractures: a gap in evidence-based practice guideline implementation. Arch Intern Med2003 Oct 13;163(18):2165-72. [46 references] PubMed

Mudano AS, Casebeer L, Patino F, Allison JJ, Weissman NW, Kiefe CI, Person S, Gilbert D, Saag KG. Racial disparities in osteoporosis prevention in a managed care population. South Med J2003 May;96(5):445-51. PubMed

U.S. Department of Health and Human Services. Bone health and osteoporosis: a report of the Surgeon General. Rockville (MD): U.S. Department of Health and Human Services, Office of the Surgeon General; 2004.

State of Use of the Measure

STATE OF USE

Current routine use

CURRENT USE

Internal quality improvement
National reporting

Application of Measure in its Current Use

CARE SETTING

Ambulatory Care
Physician Group Practices/Clinics

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Physicians

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Individual Clinicians

TARGET POPULATION AGE

Age greater than or equal to 65 years

TARGET POPULATION GENDER

Female (only)

STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

Characteristics of the Primary Clinical Component

INCIDENCE/PREVALENCE

Unspecified

ASSOCIATION WITH VULNERABLE POPULATIONS

Unspecified

BURDEN OF ILLNESS

Unspecified

UTILIZATION

Unspecified

COSTS

Unspecified

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Living with Illness
Staying Healthy

IOM DOMAIN

Effectiveness

Data Collection for the Measure

CASE FINDING

Users of care only

DESCRIPTION OF CASE FINDING

All female patients aged 65 years and older

DENOMINATOR SAMPLING FRAME

Patients associated with provider

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions
All female patients aged 65 years and older

Exclusions

- Documentation of medical reason(s) for not ordering or performing a central dual-energy X-ray absorptiometry (DXA) or not prescribing pharmacologic therapy
- Documentation of patient reason(s) for not ordering or performing a central DXA or not prescribing pharmacologic therapy
- Documentation of system reason(s) for not ordering or performing a central DXA or not prescribing pharmacologic therapy

RELATIONSHIP OF DENOMINATOR TO NUMERATOR

All cases in the denominator are equally eligible to appear in the numerator

DENOMINATOR (INDEX) EVENT

Patient Characteristic

DENOMINATOR TIME WINDOW

Time window is a single point in time

NUMERATOR INCLUSIONS/EXCLUSIONS

Inclusions
Patients who had a central dual-energy X-ray absorptiometry (DXA) measurement ordered or performed at least once since age 60 or pharmacologic therapy* prescribed within 12 months

*__Note__: U.S. Food and Drug Administration approved pharmacologic options for osteoporosis prevention and/or treatment of postmenopausal osteoporosis include, in alphabetical order: bisphosphonates (alendronate, ibandronate, and risedronate), calcitonin, estrogens (estrogens and/or hormone therapy), parathyroid hormone [PTH (1-34), teriparatide], and selective estrogen receptor modules or SERMs (raloxifene).

Exclusions
None

MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

NUMERATOR TIME WINDOW

Fixed time period

DATA SOURCE

Administrative data
Medical record

LEVEL OF DETERMINATION OF QUALITY

Individual Case

PRE-EXISTING INSTRUMENT USED

Unspecified

Computation of the Measure

SCORING

Rate

INTERPRETATION OF SCORE

Better quality is associated with a higher score

ALLOWANCE FOR PATIENT FACTORS

Unspecified

STANDARD OF COMPARISON

Internal time comparison

Evaluation of Measure Properties

EXTENT OF MEASURE TESTING

Unspecified

Identifying Information

ORIGINAL TITLE

Measure #2: screening or therapy for women aged 65 years and older.

MEASURE COLLECTION

The Physician Consortium for Performance Improvement® Measurement Sets

MEASURE SET NAME

Osteoporosis Physician Performance Measurement Set

SUBMITTER

American Medical Association on behalf of the AAFP, AAOS, AACE, American College of Rheumatology, The Endocrine Society, Physician Consortium for Performance Improvement®, and the National Committee for Quality Assurance

DEVELOPER

American Academy of Family Physicians
American Academy of Orthopaedic Surgeons
American Association of Clinical Endocrinologists
American College of Rheumatology
National Committee for Quality Assurance
Physician Consortium for Performance Improvement®
The Endocrine Society

FUNDING SOURCE(S)

Unspecified

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FINANCIAL DISCLOSURES/OTHER POTENTIAL CONFLICTS OF INTEREST

Conflicts, if any, are disclosed in accordance with the Physician Consortium for Performance Improvement® conflict of interest policy.

ENDORSER

National Quality Forum

INCLUDED IN

Ambulatory Care Quality Alliance
Physician Quality Reporting Initiative

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

2006 Oct

MEASURE STATUS

This is the current release of the measure.

SOURCE(S)

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MEASURE AVAILABILITY

The individual measure, "Measure #2: Screening or Therapy for Women Aged 65 Years and Older," is published in the "Osteoporosis Physician Performance Measurement Set." This document and technical specifications are available in Portable Document Format (PDF) from the American Medical Association (AMA)-convened Physician Consortium for Performance Improvement® Web site: www.physicianconsortium.org.

For further information, please contact AMA staff by e-mail at cqi@ama-assn.org.

NQMC STATUS

This NQMC summary was completed by ECRI Institute on October 12, 2007. The information was verified by the measure developer on November 21, 2007.

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